

CLAIMS

1. An image processing apparatus which executes an image processing for given image data, the apparatus comprising:
 - an image obtaining unit operable to obtain at least one or
 - 5 more image data;
 - a format judging unit operable to judge a storage format of the image data for each of said obtained image data; and
 - an image processing unit operable to execute a predetermined image processing for the image data based on the
 - 10 judged format.
2. The image processing apparatus according to Claim 1,
 - wherein said format judging unit further judges whether the storage format accords to a reversible coding method or not, and
 - 15 said image processing unit further executes an image processing based on whether the storage format accords to a reversible coding method or not.
3. The image processing apparatus according to Claim 1,
 - 20 wherein said format judging unit further judges whether the storage format accords to a non-reversible coding method or not, and
 - said image processing unit further executes an image processing based on whether the storage format accords to a
 - 25 non-reversible coding method or not.
4. The image processing apparatus according to Claim 1,
 - wherein said format judging unit further judges whether the storage format is one of a JPEG and a JPEG2000 or not, and
 - 30 said image processing unit further judges that an image according to said obtained image data is a natural image and executes an image processing which is appropriate for the natural

image, in the case where the storage format is judged as the JPEG or the JPEG2000.

5 5. The image processing apparatus according to Claim 1,
 wherein said format judging unit further judges whether the
storage format accords to an Exchangeable Image File Format (Exif)
standard or not, and

 said image processing unit further executes an image
processing based on a content of parameters which are specified by
10 the Exif standard in the case where it is judged that the storage
format accords to the Exif standard.

6. The image processing apparatus according to Claim 1,
 wherein said format judging unit judges whether the storage
15 format is one of a JPEG and a JPEG2000, and whether the storage
format accords to an Exchangeable Image File Format (Exif)
standard or not, and

 said image processing unit further judges that the image data
is graphical data, and executes an image processing which is
20 appropriate for the graphical data in the case where the format does
not correspond with any of such formats as described above.

7. The image processing apparatus according to Claim 1,
 wherein said obtained image data is image object data which
25 is linked to a file which is described in a Markup Language (ML)
format or image object data which is described in an in-line format
in said file.

8. An image processing method for executing an image
30 processing for given image data, the method comprising:

 an image obtaining step of obtaining at least one or more
image data;

a format judging step of judging a format of each of said obtained image data; and

an image processing step of executing a predetermined image processing for the image data based on said judged format.

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9. The image processing method according to Claim 8, wherein said format judging step further judges whether the storage format is a JPEG, a JPEG2000 or not, and

10 said image processing step further judges that an image according to said obtained image data is a natural image, and executes an image processing which is appropriate for the natural image in the case where the format is judged as the JPEG or the JPEG2000.

15 10. The image processing method according to Claim 8, wherein said format judging step further judges whether the storage format accords to an Exchangeable Image File Format (Exif) standard or not, and

20 said image processing step further executes an image processing based on a content of parameters which are specified by the Exif standard in the case where the format accords to the Exif standard.

25 11. The image processing method according to Claim 8, wherein said format judging step judges whether the storage format is one of a JPEG and a JPEG2000, and whether a format accords to an Exchangeable Image File Format (Exif) standard or not, and

30 said image processing step further judges that the image data is graphical data, and executes an image processing which is appropriate for the graphical data in the case where the format does not correspond with any of said formats as described above.

12. The image processing method according to Claim 8,
wherein said obtained image data is image object data which
is linked to a file which is described in a Markup Language (ML)
format or image object data which is described in an in-line format
in said file.

13. An image printing apparatus which executes printing based
on given image data, the apparatus comprising:

an image obtaining unit operable to obtain at least one or
more image data;

a format judging unit operable to judge a format for each of
said obtained image data;

an image processing unit operable to execute a
predetermined image processing for the image data based on the
judged format; and

a printing unit operable to execute printing in a
predetermined printing medium based on the image data which said
image processing has been executed to.

14. The image printing apparatus according to Claim 13,
wherein said format judging unit further judges whether the
storage format is one of a JPEG and a JPEG2000 or not, and

said image processing unit further judges that an image
according to said obtained image data is a natural image, and
executes an image processing which is appropriate for the natural
image in the case where the format is judged as the JPEG or the
JPEG2000.

15. The image printing apparatus according to Claim 13,
wherein said format judging unit further judges whether the
storage format accords to an Exchangeable Image File Format (Exif)

standard or not, and

5 said image processing unit further executes an image processing based on a content of parameters which are specified by the Exif standard in the case where the format accords to the Exif standard.

16. The image printing apparatus according to Claim 13,
 wherein said format judging unit judges whether the storage format is one of a JPEG and a JPEG2000, or whether the storage
10 format accords to an Exchangeable Image File Format (Exif) standard or not, and

 said image processing unit further judges that the image data is graphical data, and executes an image processing which is appropriate for the graphical data in the case where the storage
15 format does not correspond with any of said formats as described above.

17. The image printing apparatus according to Claim 13,
 wherein said obtained image data is image object data which
20 is linked to a file which is described in a Markup Language (ML) format or image object data which is described in an in-line format in said file.

18. An image printing method for executing printing based on
25 given image data, the method comprising:

 an image obtaining step of obtaining at least one or more image data;

 a format judging step of judging a format of each of said obtained image data;

30 an image processing step of executing a predetermined image processing for the image data based on said judged format; and

 a printing step of executing printing in a predetermined

printing medium based on the image data which said image processing has been executed to.

19. The image printing method according to Claim 18,

5 wherein said format judging step further judges whether the storage format is one of a JPEG and a JPEG2000 or not, and

said image processing step further judges that an image according to said obtained image data is a natural image, and executes an image processing which is appropriate for the natural
10 image in the case where the storage format is judged as the JPEG or the JPEG2000.

20. The image printing method according to Claim 18,

15 wherein said format judging step further judges whether the storage format accords to an Exchangeable Image File Format (Exif) standard or not, and

said image processing step further executes an image processing based on a content of parameters which are specified by the Exif standard in the case where the storage format accords to
20 the Exif standard.

21. The image printing method according to Claim 18,

25 wherein said format judging step judges whether the storage format is one of a JPEG and a JPEG2000, and whether the storage format accords to an Exchangeable Image File Format (Exif) standard or not, and

said image processing step further judges that the image data is graphical data, and executes an image processing which is appropriate for the graphical data in the case where the storage
30 format does not correspond with any of said formats as described above.

22. The image printing method according to Claim 18,
wherein said obtained image data is image object data which
is linked to a file which is described in a Markup Language (ML)
format or image object data which is described in an in-line format
5 in said file.

23. An image processing apparatus which executes an image
processing for given image data, and outputs the image data to a
specific apparatus, the image processing apparatus comprising:

10 an image obtaining unit operable to obtain information
indicating a color space and at least one or more image data which
is defined according to the color space;

a color space specifying unit operable to specify a color space
according to the specific apparatus; and

15 a color space conversion unit operable to convert the obtained
image data so that the data is defined according to the specified
color space.

24. The image processing apparatus according to Claim 23,
20 wherein the information indicating a color space is included in
the image data.

25. The image processing apparatus according to Claim 23,
wherein the image data is image object data which is linked to
25 a file which is described in a Markup Language (ML) format or image
object data which is described in an in-line format in said file, and
the color space information is defined as parameters for the
image object data.

30 26. An image processing method for executing an image
processing for given image data, and outputting the image data to a
specific apparatus, the method comprising:

an image obtaining step of obtaining information indicating a color space and at least one or more image data which is defined according to the color space;

5 a color space specifying step of specifying a color space according to the specific apparatus; and

a color space conversion step of converting the obtained image data so that the data is defined according to the specified color space.

10 27. The image processing method according to Claim 26, wherein the information indicating a color space is included in the image data.

15 28. The image processing method according to Claim 26, wherein the image data is image object data which is linked to a file which is described in a Markup Language (ML) format or image object data which is described in an in-line format in said file, and the color space information is defined as parameters for the image object data.

20 29. An image printing apparatus which executes printing based on given image data, the apparatus comprising:

25 an image obtaining unit operable to obtain information indicating a color space and at least one or more image data which is defined according to the color space;

a color space specifying unit operable to specify a color space according to the image printing apparatus;

30 a color space conversion unit operable to convert the obtained image data so that the data is defined according to the specified color space; and

a printing unit operable to execute printing in a predetermined printing medium based on the image data which said

color space conversion has been executed to.

30. The image printing apparatus according to Claim 29,
wherein the information indicating a color space is included in
5 the image data.

31. The image printing apparatus according to Claim 29,
wherein the image data is image object data which is linked to
a file which is described in a Markup Language (ML) format or image
10 object data which is described in an in-line format in said file, and
the color space information is defined as parameters for the
image object data.

32. The image printing apparatus according to Claim 29,
15 wherein the color space information is obtained as printing
parameters.

33. An image printing method for executing printing based on
given image data, the method comprising:
20 an image obtaining step of obtaining information indicating a
color space and at least one or more image data which is defined
according to the color space;
a color space specifying step of specifying a color space
according to the image printing apparatus
25 a color space conversion step of converting the obtained
image data so that the data is defined according to the specified
color space; and
a printing step of executing printing in a predetermined
printing medium based on the image data which said color
30 conversion has been executed to.

34. The image printing method according to Claim 33,

wherein the information indicating a color space is included in the image data.

35. The image printing method according to Claim 33,
5 wherein the image data is image object data which is linked to a file which is described in a Markup Language (ML) format or image object data which is described in an in-line format in said file, and the color space information is defined as parameters for the image object data.

10 36. The image printing method according to Claim 33, wherein the color space information is obtained as printing parameters.

15 37. An image processing apparatus which executes an image processing for given image data and outputs the image data to a specific apparatus, the image processing apparatus comprising:

an image obtaining unit operable to obtain at least one or more image data and information which indicates an apparatus
20 which has generated the image data;

a color space estimating unit operable to estimate a color space according to the image data based on the information which indicates an apparatus which has generated the image data;

25 a color space specifying unit operable to specify a color space according to the specific apparatus; and

a color space conversion unit operable to convert the obtained image data so that a definition according to the estimated color space becomes a definition according to the specified color space.

30 38. The image processing apparatus according to Claim 37, wherein the image data is image object data which is linked to a file which is described in a Markup Language (ML) format or image

object data which is described in an in-line format in said file, and
the information about the source apparatus for obtaining the
image data is defined as parameters for the image object data.

5 39. An image processing method which executes an image
processing for given image data and outputs the image data to a
specific apparatus, the method comprising:

an image obtaining step of obtaining at least one or more
image data and information which indicates an apparatus which has
10 generated the image data;

a color space estimating step of estimating a color space
according to the source apparatus for obtaining the image data
based on the image data;

a color space specifying step of specifying a color space
15 according to the specific apparatus; and

a color space conversion step of converting the obtained
image data so that a definition according to the estimated color
space becomes a definition according to the specified color space.

20 40. The image processing method according to Claim 39,
wherein the image data is image object data which is linked to
a file which is described in a Markup Language (ML) format or image
object data which is described in an in-line format in said file, and
the information about the source apparatus for obtaining the
25 image data is defined as parameters for the image object data.

41. An image printing apparatus which executes printing based
on given image data, the apparatus comprising:

an image obtaining unit operable to obtain at least one or
30 more image data and information which indicates an apparatus
which has generated the image data;

a color space estimating unit operable to estimate a color

space according to the image data based on the information which indicates an apparatus which has generated the image data;

a color space specifying unit operable to specify a color space according to the image printing apparatus; and

5 a color space conversion unit operable to convert the obtained image data so that a definition according to the estimated color space becomes a definition according to the specified color space.

42. The image printing apparatus according to Claim 41,

10 wherein the image data is image object data which is linked to a file which is described in a Markup Language (ML) format or image object data which is described in an in-line format in said file, and the information about the source apparatus for obtaining the image data is defined as parameters for the image object data.

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43. An image printing method for executing printing based on given image data, the method comprising:

an image obtaining step of obtaining at least one or more image data and information which indicates an apparatus which has
20 generated the image data;

a color space estimating step of estimating a color space according to the image data based on the information which indicates an apparatus which has generated the image data;

a color space specifying step of specifying a color space
25 according to the image printing apparatus;

a color space conversion step of converting the obtained image data so that a definition according to the estimated color space becomes a definition according to the specified color space; and

30 a printing step of executing printing in a predetermined printing medium based on the image data to which said color space conversion has been executed.

44. The image printing method according to Claim 43,
wherein the image data is image object data which is linked to
a file which is described in a Markup Language (ML) format or image
5 object data which is described in an in-line format in said file, and
the information about the source apparatus for obtaining the
image data is defined as parameters for the image object data.